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# U.S. NAVY MEDICINE

June 1978

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# U.S. NAVY MEDICINE

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**COVER:** "I often feel drained at the end of an eight-hour shift," says HM3 Ralph Jones of his work in NRMC San Diego's surgical intensive care unit. But, he adds, "I can't think of any other place I'd rather be." For a look at what the future holds for Jones and his 23,000 fellow corpsmen, celebrating the Hospital Corps' 80th anniversary this month, see page 12. (Photo by Claudie Bob Johnson II)

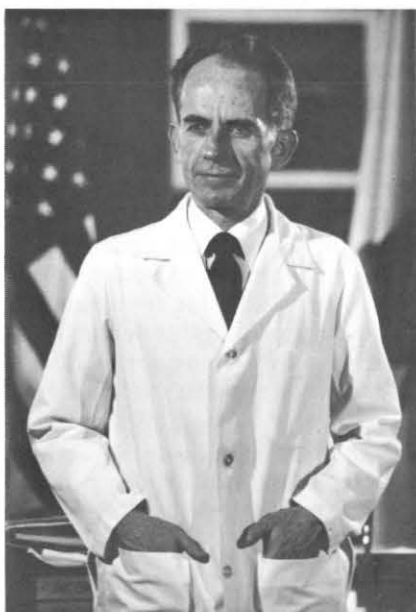
## From the Surgeon General

# The War on Asbestos Disease

During the past several years, leading medical journals have reported epidemiological findings related to asbestos disease in shipyard workers. This group of industrial workers, and perhaps a significant number of active-duty personnel, suffer an excessive prevalence of lung fibrosis and breathing difficulty, bronchogenic carcinoma, and mesothelioma as a result of exposure to airborne asbestos many years earlier.

You, as Navy health care personnel, have a particularly important responsibility to become familiar with illness related to asbestos exposure. You are the most valuable resource the Navy has when it comes to treating and counseling worried individuals, or presenting informed opinion on asbestos as a public health problem.

Since World War II, there have been continuing Navy efforts to carry out a comprehensive control program for persons occupationally exposed to asbestos. As knowledge of the health consequences of asbestos exposure has expanded, so have the efforts to prevent asbestos-related disease. Present Navy policy



prohibits the use of asbestos in the construction, overhaul, repair, and maintenance of naval vessels and facilities. In operations where asbestos can become airborne, such as in "rip-out" of old pipe insulation or in building demolition, strict environmental control and personal protective measures are required. All personnel potentially exposed to airborne asbestos are required to have annual exams, including chest X-ray and pulmonary function test-

ing to detect early signs of asbestos disease.

I have designated the Navy Environmental Health Center as the central management point for a comprehensive, Navywide medical surveillance program for asbestos disease. This program includes the establishment of a registry to monitor the incidence and prevalence of asbestos disease in Navy civilian and military workers, in order that effectiveness of both the asbestos control program and the screening tests for early asbestos disease can be evaluated, and that proper followup of all workers who do have the disease can be assured.

With continuing aggressive effort, asbestosis and the cancers related to it can be eliminated from society in the same manner as the communicable disease killers of the past. I charge you to be an active part of that effort.

W.P. ARENTZEN  
Vice Admiral, Medical Corps  
United States Navy

## Department Rounds

### 'Can Do' Spirit: Alive and Well

Enterprising Navy do-it-yourselfers are finding that ingenuity, initiative, and a bit of elbow grease can go a long way toward solving a multitude of practical problems. Some cases in point:

**At NRMCM Memphis**, the Emergency Medical Service needed an extrication vehicle: a tough, four-wheel-drive crash truck that could cut through rough terrain, as necessary, to reach automobile accident sites, and could carry the large special tools required to free trapped victims from the wreckage.

The solution to the problem was provided by EMS corpsmen, who put in long hours to overhaul and refurbish an elderly Dodge Powerwagon affectionately known as "the cracker box."

The result: a lot of tired muscles for the corpsmen, but a sense of strong satisfaction—and a vehicle perfectly suited to its new use.

**Aboard the USS Guadalcanal**, nine corpsmen took a good look around their medical department and decided they could improve what they saw.

Under the lead of HMC David McCabe, they pitched in with gusto, installing a false overhead, acoustical tile, and new paneling; repainting; and hanging an array of pictures and plaques as a final touch for the new decor.

The area covered was no small one—the *Guadalcanal's* medical department includes three wards for patients, two operating rooms, an X-ray unit, an aviation examining room, and a blood bank. But the dividends were well worth the effort: a considerable increase in patient comfort, and quieter, more

attractive surroundings for both patients and medical staff.

**At NRMCM Camp Lejeune**, CDR Cyrus M. Day III (MC)—mulling over the difficulties of medical practice in a battlefield situation—felt that military surgeons should have an alternative to the dirt-floored operating tent so familiar to viewers of *M\*A\*S\*H*.

He sought help from LT Thomas W. Gibb, Jr. (CEC), naval regional public works officer, and the two soon established some exacting criteria for the proposed new field facility. It would be highly mobile. It would place no unusual demands on existing supply, transportation, and maintenance systems; yet it would

**At NRMCM Memphis**, corpsmen convert an aging Dodge Powerwagon for special emergency use. Photos by Richard Ramsey.





be fully capable of supporting complex surgical procedures in the field.

Lying in a salvage yard at Lejeune were two 1960-model expando-vans that had outlived their former usefulness. One man's trash is another man's treasure, as Dr. Day and LT Gibb quickly realized. With the aid of Navy and Marine Corps volunteers, who worked on weekends and after hours, the vans were soon transformed into an operating room and a recovery room on wheels, ready for use in the field.

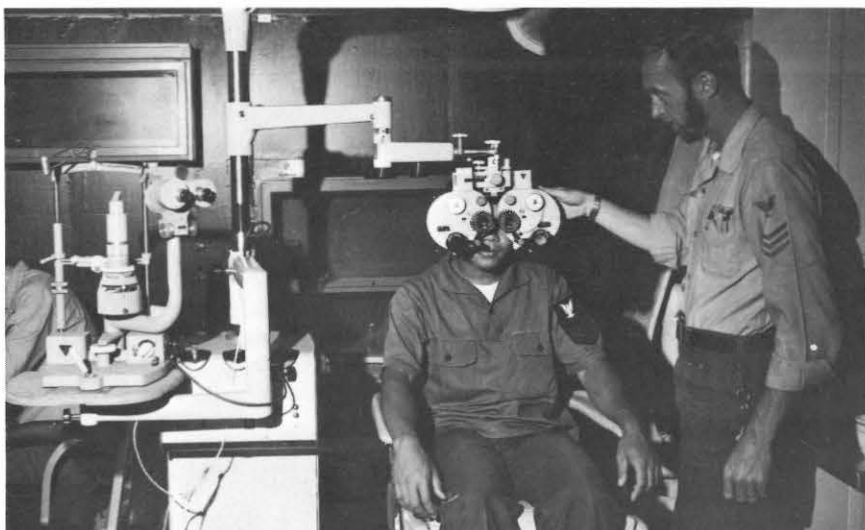
The prototype facility—designated “MOVE,” for “mobile operating van, expandable”—came through a series of field tests with flying colors and supported Exercise Solid Shield 77 with the 2d Medical Battalion.

The MOVE units have many virtues. They can traverse terrain that any other tactical vehicle can negotiate. They can easily be lifted from one truck bed to another, to a trailer, to a railroad car, to a barge, or to a ship. They can be tucked into a C-130 or be lifted from one site to another by helicopter.

The scrubbable, plastic-paneled operating room is roomy enough for two operating tables, equipment, and required staff. All utilities—including heating, air-conditioning, venting, and electricity—are built into the unit and include backup systems. The recovery van, connected with the OR by a collar, maintains a constant temperature and can accommodate as many as 18 patients. A third vehicle, used as a central supply room, provides scrub and sterilization facilities as well as space for supply storage.

The units, with their equipment stored inside, can be set up and ready to receive patients in just a few hours.

In contrast to the traditional field facility, MOVE enables medical personnel to treat casualties in a controlled environment—a big step forward in the battle to save lives. It's a pretty important result from some simple ingredients: ingenuity, initiative, and a bit of elbow grease.



Patients and staff find life more pleasant in the newly spruced up medical department of the Guadalcanal.



Surgical team prepares for action in the MOVE unit (mobile operating van, expandable) developed at Camp Lejeune.

# Life Preserver/Medi-Pac Tested

Under sponsorship of the Navy Science Advisory Program, engineers at the Naval Ocean Systems Center, San Diego, are testing a life-vest medical pack designed by HM3 Larry Gann.

Gann is assigned to Attack Squadron 22, based at the Naval Air Station in Lemoore, Calif. During a deployment on the USS *Coral Sea* (CV-43), he quickly discovered that environmental conditions on the flight deck were hampering delivery of medical care. The standard "Unit One"—a three-pocket bag of medical supplies worn over the shoulder—was awkward to use in the heavy winds, fumes, smoke, rain, and darkness the corpsman has to contend with. Equipment in the Unit One was not readily accessible, and it was easy to become entangled in the bag's strap. Clearly, a better design was called for.

Gann's solution for the problem is a modification of the flight-deck life jacket to include nine pockets for carrying medical equipment and supplies. Gann's Medi-Pac is less bulky than the Unit One, and its pockets enable the corpsman to carry inflatable splints, a variety of dressings, and other useful items that do not fit into the standard pack. Also, the corpsman can move freely about the flight deck to deliver care: the Medi-Pac has no dangling straps to trip him up.

"Gann's Medi-Pac Unit is a significant improvement over the Unit One," says CDR C.H. Spence (MC), *Coral Sea* senior medical officer. "It might be useful, too, for ambulance and rescue crews. Also, it might be combined with the flak jacket for use by corpsmen with the Fleet Marine Force."

Fourteen of the Gann Medi-Pacs have been fabricated and are now being tested aboard 10 Navy ships whose types range from carriers to submarines. Each of these ships

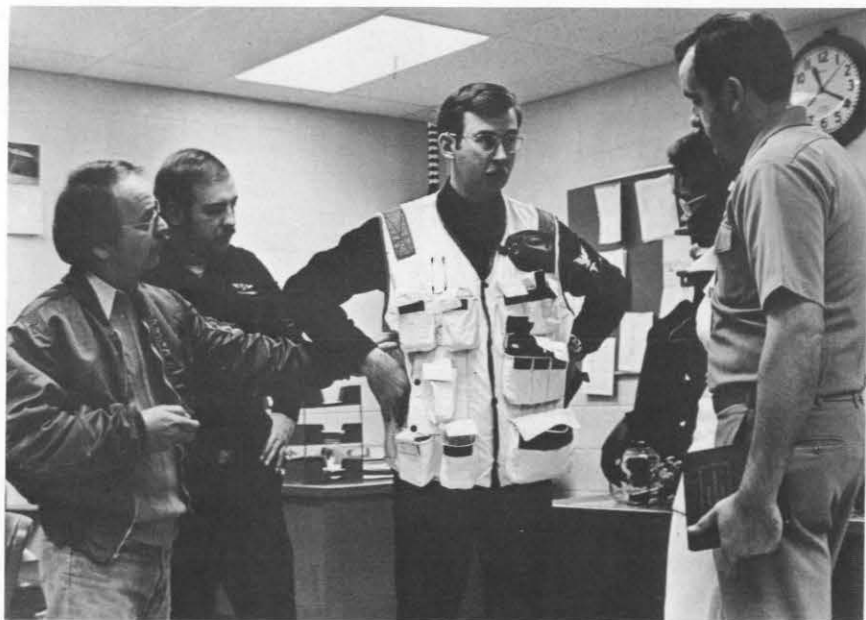
will answer an NOSC questionnaire on the pack's performance. "From those responses," says Richard Kataoka, project director for the Medi-Pac evaluation, "we will be able to determine how useful the pack is and find out if there are other improvements which could be

incorporated into the design."

Sea trials are expected to be completed in September, and the subsequent evaluation should take about three months. After that, a decision will be made on whether the Medi-Pac should be produced as a standard item for fleet-wide use.



**First Medi-Pac.** Pockets for supplies are sewn onto a standard Navy life preserver.



**HM3 Gann, wearing Medi-Pac, discusses its contents with staff members at NAS Lemoore.** Photos by Steve Hiney

# Notes & Announcements

## IN MEMORIAM

**RADM Allan S. Chrisman**, MC, USN (Ret.), former deputy surgeon general of the Navy and assistant chief of the Bureau of Medicine and Surgery, died 18 April 1978 in Rockville, Md., at age 71.

Born in Greensboro, N.C., on 18 July 1906, RADM Chrisman received his Bachelor of Science degree from the University of North Carolina, and his M.D. degree from Harvard Medical School in 1930. He was commissioned a LTJG in the Navy Medical Corps on 3 June 1930, and interned at Naval Hospital Philadelphia, Pa. He then became a student at the Submarine School, New London, Conn., and subsequently served in many duty assignments associated with submarines. From September 1938 to July 1940, RADM Chrisman was medical officer aboard the aircraft carrier *USS Ranger*, on neutrality patrol in the Atlantic. He then served a residency in radiology at Naval Hospital, Washington, D.C. During World War II, he saw action in the South Pacific area and served as medical officer at the advanced naval base, Tulagi, Solomon Islands, where he was in charge of the Tulagi-Florida Medical Facilities.

In September 1952, RADM Chrisman assumed duties as director, Personnel Division, BUMED. On 31 July 1956, he was ordered to Naval Hospital San Diego, Calif., as commanding officer and on 1 Dec 1958 was assigned additional duty as Eleventh Naval District medical officer. He was promoted to RADM on 1 Aug 1958. On 24 April 1961, he returned to BUMED as deputy and assistant chief and held this position until he retired on 1 July 1964.

RADM Chrisman was a member of the American Medical Association, a Diplomate of the American Board of Preventive Medicine, and a Fellow of the American College of Preventive Medicine. He held the Navy Commendation Ribbon, American Defense Service Medal with Fleet Clasp, American Campaign Medal, Asiatic-Pacific Campaign Medal with one star, World War II Victory Medal, and National Defense Service Medal.

**RADM Harold J. Cokely**, MC, USN (Ret.), a former Navy urologist who served 36 years with the Navy Medical Corps, died 6 March 1978 in San Diego, Calif., at age 72.

Borne in Pickering, Mo., on 9 Feb 1906, Dr. Cokely



**RADM Chrisman  
1906-1978**

received his Bachelor of Science degree in medicine from the University of Missouri, Columbia, Mo., in 1929, and his M.D. degree from Jefferson Medical College, Philadelphia, Pa., in 1931. He was commissioned a LTJG in the Navy Medical Corps on 8 June 1931, and interned at Naval Hospital Portsmouth, Va.

Dr. Cokely began his studies in urology on 29 July 1940 at the Naval Hospital, Washington, D.C., and continued his training at the James Buchanan Brady Foundation, New York Hospital, New York City. He was chief of urology aboard the *USS Relief* and participated in the Gilbert Islands operation, the occupation of Kwajalein and Majuro Atolls, and the capture and occupation of Saipan.

From October 1944 to June 1953, Dr. Cokely was chief of urology at several naval hospitals. In the next few years he served as executive officer at naval hospitals at Guam, M.I., and St. Albans, N.Y. He then became commanding officer of the naval hospitals at Key West, Fla. (1957-1959); St. Albans, N.Y. (1959-1961), San Diego, Calif. (1961-1964), and Oakland, Calif., from which he retired in 1967.

Dr. Cokely was a Diplomate of the American Board of Urology, a Fellow of the American College of Surgeons, and a member of the American Urological Association and the American Medical Association. He held the Navy Commendation Ribbon, American Defense Service Medal, American Campaign Medal, Asiatic-Pacific Campaign Medal with stars, World War II Victory Medal, and National Defense Service Medal.

## CONTINUING MEDICAL EDUCATION CREDIT FOR CORRESPONDENCE COURSES

Selected medical correspondence courses developed by the Naval Health Sciences Education and Training Command and administered by the Naval School of Health Sciences, Bethesda, Md., are now accredited as Category I, Continuing Medical Education (CME) activities. The Bureau of Medicine and Surgery, as the sponsoring organization for these courses, has issued the following certification for each of the courses listed below.

As an organization accredited for continuing medical education, the Bureau of Medicine and Surgery certifies that this continuing medical education activity meets the criteria for (insert the number of hours as indicated below) credit hours in Category I of the Physician's Recognition Award of the American Medical Association provided it is used and completed as designed.

- *Blood Component Therapy*, NAVEDTRA 13121 (12 credit hours)
- *Control of Communicable Diseases in Man*, NAVEDTRA 10772-C (30 credit hours)
- *Hospital Environmental Safety*, NAVEDTRA 13120 (30 credit hours)



- *Low Temperature Sanitation and Cold Weather Medicine*, NAVEDTRA 10997-C (18 credit hours)
- *Technical Aspects of Occupational Medicine*, NAVEDTRA 10700-1 (30 credit hours)

The Naval School of Health Sciences, Correspondence Courses Division, will issue a letter to all enrollees satisfactorily completing a correspondence course. This letter includes the final grade and the date of the completed course, and should serve as the physician's record of completed continuing medical education activities.

The Council on Medical Education accepts the signed statement of the physician on his application for the Physician's Recognition Award concerning the kind and amount of continuing medical education he has completed. In reporting completion of these correspondence courses, the physician should be sure to give the name of the accredited sponsoring organization as the Bureau of Medicine and Surgery, Navy Department.

Requests for course enrollment should be forwarded via official channels on NAVEDTRA Form 1550/1, (available from training offices or Reserve centers) by changing the "to" line, to read: Commanding Officer, Naval School of Health Sciences, Correspondence Courses Division, National Naval Medical Center, Bethesda, Md. 20014.

#### REVISED CORRESPONDENCE COURSES

Two Navy correspondence courses have been revised and are available to Medical Department officers, enlisted personnel on active duty, and Reservists in an inactive duty status.

- *Low Temperature Sanitation and Cold Weather Medicine* (NAVEDTRA 10997-C) consists of three assignments. The first two sections present general information on construction of cold climate sanitation installations and complications in water supply, sewage and garbage disposal in low temperature regions. The third section provides information on the prevention, identification, and treatment of cold injuries. Reservists may receive six retirement points upon completion of this course. Three texts are used: "Sewerage and Sewage Disposal in Cold Regions," Oct 1969; "Water Supply in Cold Regions," Jan 1969; and "Cold Injury," NAVMED P-5052-29, Sept 1976.

- *Treatment of Chemical Agent Casualties* (NAVEDTRA 10765-B) contains important techniques for battlefield treatment of chemical warfare injuries. It describes methods for detecting and identifying chemical agents, ways of differentiating casualties from non-casualties, and means to protect personnel from chemical agents. Physiological and psychological effects of various agents and the recommended treatment for each are explored in the course. It consists of three assignments, and Reservists may receive six retirement points upon its completion. The text used is "Treatment of Chemical Agent Casualties," NAVMED P-5041, May 1974.

Reservists who have completed earlier versions of these courses may receive additional credit toward retirement for completing the revised editions. The courses must be completed while in an inactive duty status in order to receive credit toward retirement.

Requests for enrollment should be forwarded via official channels on NAVEDTRA Form 1550/1 (available from training offices or Reserve centers) by changing the "to" line, to read: Commanding Officer, Naval School of Health Sciences, Correspondence Courses Division, National Naval Medical Center, Bethesda, Md. 20014.

#### CORRESPONDENCE COURSE DISCONTINUED

The correspondence course for officers, "Administrative Aspects of Occupational Medicine" (NAVEDTRA 10704), has been discontinued pending the development of new text materials.

#### NUCLEAR WEAPONS EFFECTS COURSE

The Armed Forces Radiobiology Research Institute (AFRRI) and the Nuclear Medicine Branch, National Naval Medical Center, Bethesda, Md., will co-sponsor a Nuclear Weapons Effects course 23-27 Oct 1978 and 29 Jan-2 Feb 1979. (For a fuller description of the course, see April *U.S. Navy Medicine*.)

Priority will be given to radiology residents and nuclear medicine fellows who require this training as an integral part of their specialty programs. Consideration will then be given to occupational medicine physicians, then to interested medical officers, on a space-available basis. The course is planned as an on-going program, and has been approved by the American Medical Association for Category I Hour-for-Hour Continuing Education credit. Students must have a "secret" security clearance.

AFRRI will provide funding for travel and one week's per diem allowance to 60 students—10 Army, 10 Navy, and 10 Air Force students in each of the two classes.

Interested applicants should contact LCDR Jerry A. Thomas, Administrative Officer, Nuclear Medicine Branch, National Naval Medical Center, Bethesda, Md. 20014 (Autovon 295-0097 or -0098).

#### MANAGEMENT COURSE FOR NURSE CORPS OFFICERS

Nurse Corps officers interested in attending the management course leading to a Master of Science degree at the Naval Postgraduate School, Monterey, Calif., should submit applications in accordance with the BUMEDINST 1520.14 series no later than 1 Sept 1978. Applicants must be Regular Navy, with a minimum of five years of active duty, and hold a baccalaureate degree. In addition, a minimum of two semesters of college-level mathematics is required. Courses in differential and integral calculus as well as statistics are desirable.



# NAVMED Newsmakers

In 1971, SGT **Edward Uldrich III** earned a Bronze Star for bravery in action while serving with the 101st Army Airborne Division in South Vietnam.

Returning to the States with a new life plan, he received his diploma in nursing from the Lincoln (Nebraska) General Hospital School of Nursing in 1974 and entered the Navy Nurse Corps in 1975.

Today, LTJG Uldrich is assigned to the Newborn Nursery/Delivery Room at NRMC New Orleans, where he's happily at home in a world, not of infantry, but of infants.

HM3 **Connie Estrada**, formerly senior hospital corpsman in the intensive care unit at NRMC Camp Lejeune, is on her way to a nursing career, with help from a \$500 scholarship award from the medical center's nursing service.



LTJG Murray: Riding high

The scholarship, given annually, was established in memory of Commander Shirley M. Frawley, who was a nurse at NRMC Camp Lejeune. The award is intended to help qualified and dedicated persons from Camp Lejeune and the local area pursue careers in nursing.

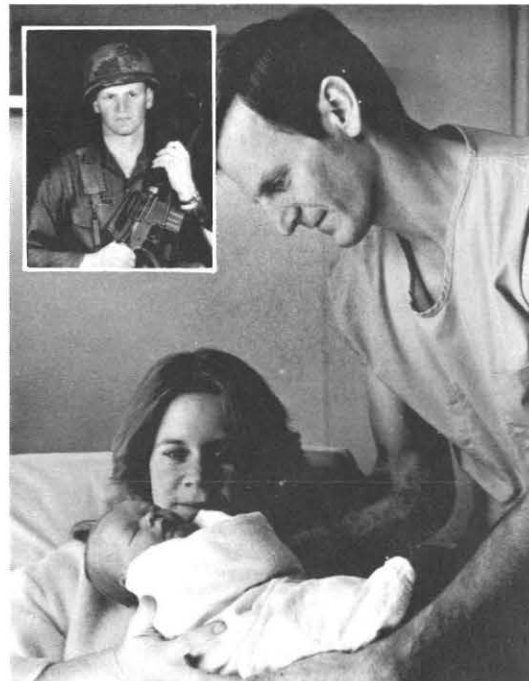
Estrada, who says she has dreamed about becoming a nurse "ever since I was a little girl," will attend the Del Mar College of Nursing in Corpus Christi, Texas.

For LTJG **Laurel Murray**, a nurse on the cardio-thoracic ward at NRMC San Diego, jodhpurs and riding boots are a second uniform of the day.

Addicted to horseback riding since her childhood, Murray nevertheless turned down offers to ride as a "pro" and put herself through nursing school instead. After a stint in Iran, during which she worked as a nurse for the Iranian government, she decided to enter the U.S. Navy. To occupy time while waiting for her commission, she bought her horse, "Baw Namack," and embarked on breaking and training him for cross-country, dressage, and stadium competition.

As a "rookie" competitor last year, "Mack" walked off with an impressive share of trophies. He and his trainer are hard at work on plans to increase it this year.

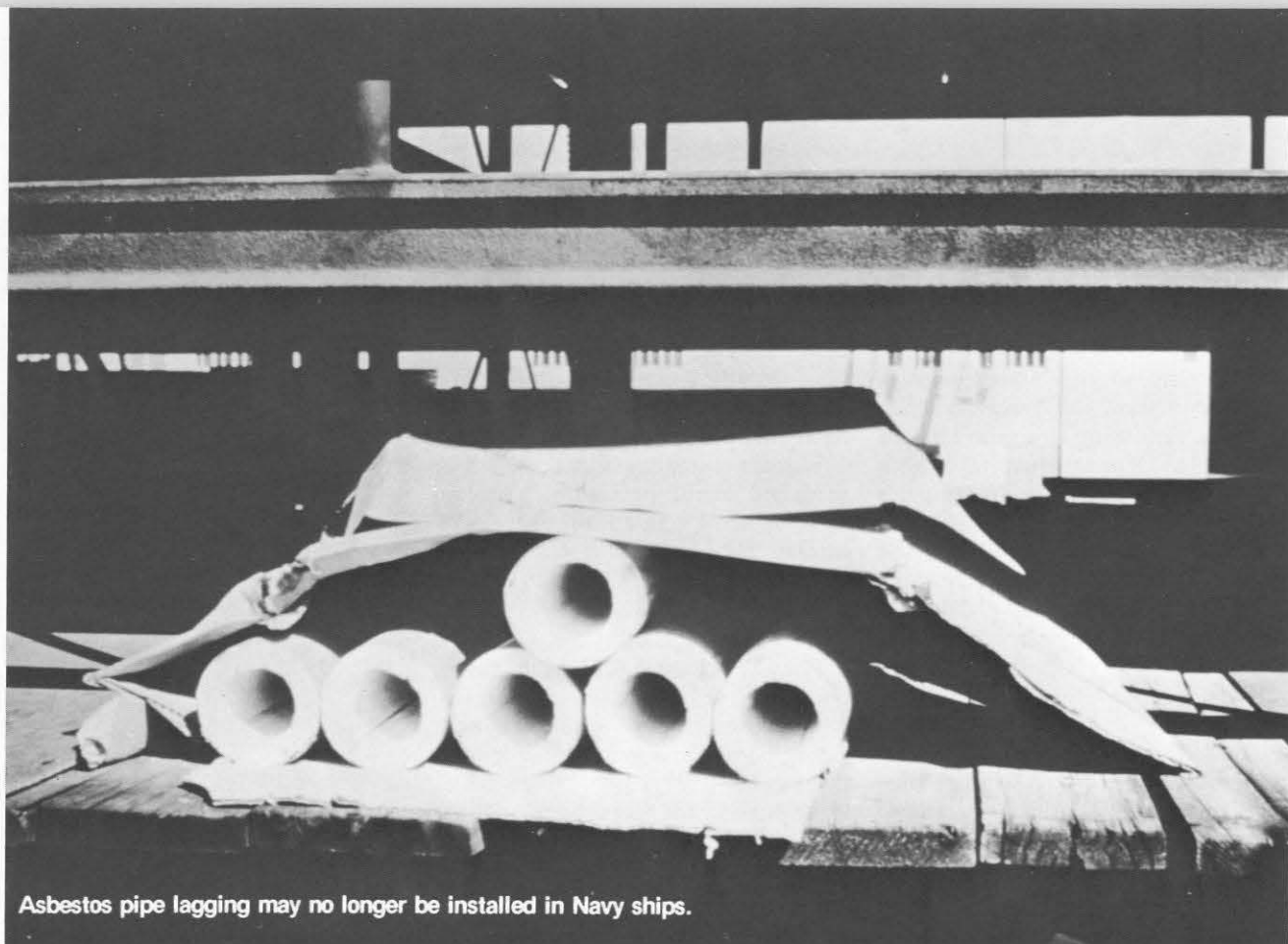
Marathon running is the loneliest athletic event. For HM3 **Russell Jones**, assigned to the Food Service at NRMC Philadelphia, training for a marathon means running 100 miles a week and entering any kind of track competition he can get his legs into. His goal: the 1980 Olympics. An All-Navy distance runner, HM3 Jones was the Navy's best in the 5,000 and 10,000 meter runs at last year's Intra-Service Track Meet.



LTJG Uldrich: A life transformed



HM3 Jones: The Navy's best



Asbestos pipe lagging may no longer be installed in Navy ships.

## Asbestos: A Clear and Present Danger

Since World War II, the Navy has been increasing its medical, engineering, and control efforts to eliminate the health hazards due to asbestos. RADM Henry A. Sparks, MC, USN, BUMED Chief of Operational Medical Support, is deeply involved in these efforts. In the following interview, he expresses some of his concerns.

**Admiral Sparks, the news media have reported asbestos health problems in our Navy shipyards. Could you tell us the scope of the problem?**

Asbestos has been an increasing medical problem since World War II, when it was widely used in the shipbuilding industry. Since it takes

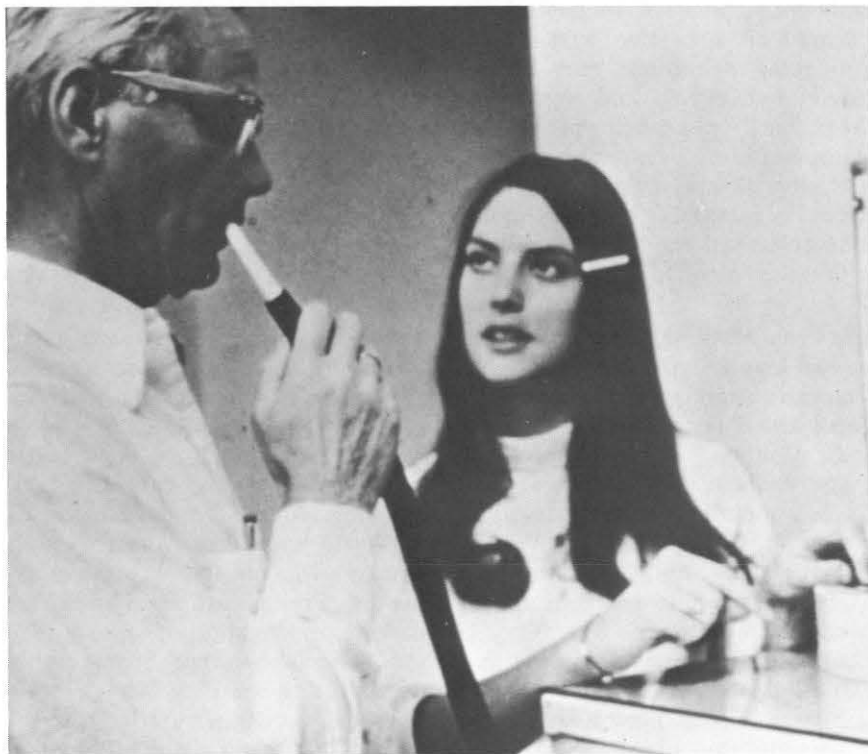


RADM Sparks

10 to 40 years for some of the effects of asbestos to become apparent, it was not until the 1960's that the serious health consequences of exposure to asbestos were beginning to be understood. These include asbestosis, carcinoma of the lung, and mesothelioma.

**How has asbestos been used in the Navy?**

Asbestos is a fibrous material that has been used in pipe covering, gaskets, and cloth for engines, hulls, and decks. Navy workers are exposed to it in the fabrication of asbestos materials, their installation, and their removal during repair and fitting work. Asbestos insulation, shingles, and floor tiles



Pulmonary function tests in asbestosis (above) show decreased lung volume, no obstruction to air flow. Below: Diffuse scarring of asbestosis is apparent in this X-ray. Patient also has emphysema.

have been widely used in building construction, and exposure today occurs during structural renovation and demolition.

#### **How many Navy and Marine Corps personnel are exposed to airborne asbestos?**

I'm glad you mentioned airborne asbestos, because it is important to remember that asbestos isn't dangerous unless it is inhaled, or possibly when it is ingested. As many as 70,000 Navy civilian workers and 150,000 active-duty personnel may presently be at risk of airborne exposure. These persons deserve good industrial hygiene and medical surveillance to assure that they are not paying an intolerable price for doing their jobs.

#### **Just how dangerous is working around asbestos?**

The danger varies, depending upon the number of asbestos fibers in the

breathing air, the size of the fiber (short, very fine fibers are the most dangerous), and individual susceptibility. *Cigarette smoking greatly magnifies the danger of asbestos exposure.*

#### **What are the symptoms and signs of asbestosis?**

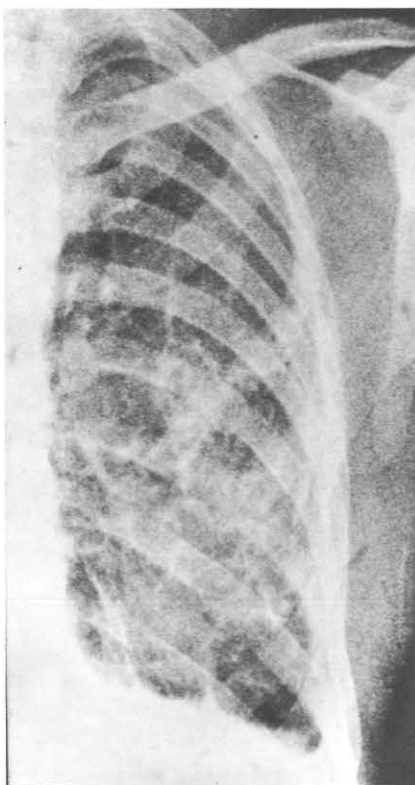
Asbestosis is a chronic, often hidden lung disease in which the symptoms may not begin until a decade after first exposure. The earliest and most prominent symptom is progressive difficulty in breathing with physical exertion. These persons may have dry, crackling sounds in the lung bases when examined with a stethoscope. With advanced disease, there may be clubbing of the fingers and cyanosis. The chest X-ray will show diffuse scarring of the lungs. In the cigarette smoker, these findings may be accompanied by the changes of chronic bronchitis.

#### **Is asbestosis often diagnosed?**

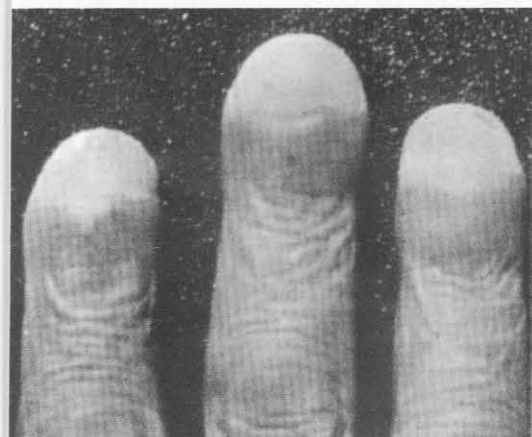
Probably not often enough. This is a very difficult disease to diagnose when one does not suspect it. Generally, occupational medicine and pulmonary specialists use four criteria: (1) a history of occupational exposure to airborne asbestos; (2) physical signs, such as dry, crackling "cellophane" rales, finger clubbing, or cyanosis; (3) progressive X-ray changes of lung fibrosis; (4) *breathing tests that indicate lung fibrosis and inability of oxygen to get from the lung to the blood.* All of these criteria should be present.

#### **Most of us know about lung cancer, but what is mesothelioma?**

Mesothelioma is a rare cancer that affects the pleura or the peritoneum, the inner linings of the chest and the abdomen, respectively. It can occur in persons not exposed to asbestos; however, 85% of reported cases have occurred in relation to asbestos exposure. The first symptom of pleural mesothelioma is







Clubbing of fingers may be seen in patients with advanced asbestosis.

usually chest pain when the patient takes deep breaths. This tumor is usually diagnosed by chest X-ray and needle biopsy. Open biopsy as a primary diagnostic technique is not recommended, because of the patients' impaired lung function.

#### How is asbestos disease prevented?

Substitution of non-asbestos materials is the primary means of prevention. In the interim, and during the substitution process, good work procedures and engineering con-

trols must be used to control the escape of asbestos dust. Dust-producing operations may be isolated, wet down, and ventilated. Approved personal protective equipment, e.g., respirators, coveralls, and gloves, must be worn. All products containing asbestos should be labeled and handled carefully for ultimate controlled disposal.

#### How can Medical Department personnel help?

You can't eliminate a problem if you don't know the critical aspects of that problem. Unfortunately, too many medical personnel are uninformed about asbestos and its associated health problems. We in BUMED are trying to increase awareness of this problem in the Medical Department. The Navy is planning long-range programs that will eliminate the hazard.

First, hospital personnel should appreciate the silent, progressive nature of asbestos diseases and be prepared to detect them early.

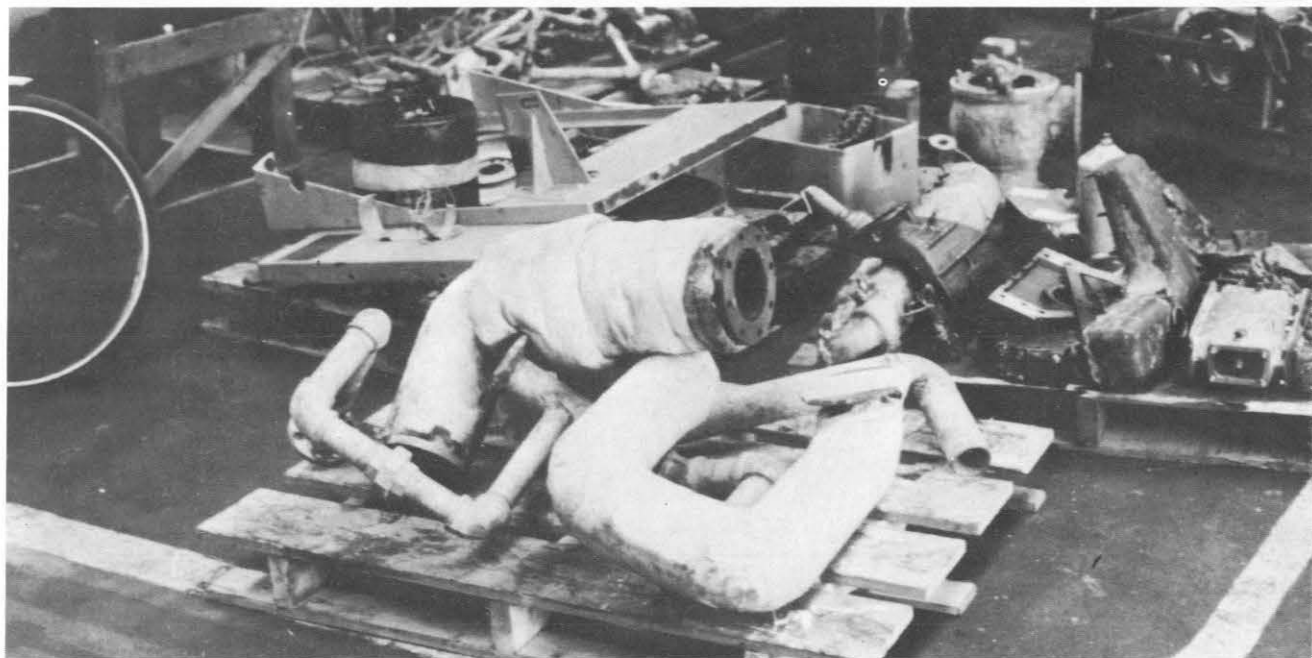
Second, shipyard and shipboard Medical Department representatives should be familiar with dust-control measures and personal pro-

TECTIVE equipment and teach workers how to protect themselves against this danger.

I would like every person in the Navy Medical Department to become familiar with OPNAVINST 6260.1, which defines the Navy's asbestos control program.

#### How does smoking relate to diseases caused by asbestos?

This is an extremely important question. Cigarette smoke irritates the lung and damages its ability to clear itself of inhaled dust. Asbestos workers who smoke are *eight times as likely* to have lung cancer as non-smoking workers, and *92 times as likely* to have lung cancer as non-smokers who are not exposed to asbestos. Preliminary data indicates that discontinuation of smoking by the asbestos worker considerably decreases the risk of lung cancer; thus it is very important to counsel those who have worked with asbestos to discontinue smoking. Programs are being developed to help Navy asbestos workers stop smoking. The relationship between asbestos-related mesothelioma and smoking is not certain.



Safe disposal of asbestos-containing scrap material should protect the unwary from inadvertent exposure.



# NOTAP Collects HM Data

As reported in the April issue of *U.S. Navy Medicine*, the Navy Occupational Task Analysis Program (NOTAP) is a Bureau of Naval Personnel project to conduct a standardized task analysis on all Navy enlisted ratings and establish an occupational data bank.

For more than a year, BUPERS and BUMED have worked closely to include the hospital corpsman rating in this Navy-wide project. Many ships, Fleet Marine Force units, and naval regional medical centers have been visited by NOTAP personnel for collection of occupational data relevant to the Hospital Corps. That data will provide the substance for task analysis on 13 specialty areas associated with hospital corpsmen.\*

Already, more than 4,000 corpsmen have contributed their time and the benefit of their experience to this project. Many more will be asked to participate by completing NOTAP questionnaires designed for each of the 13 specialty areas. In doing so, hospital corpsmen will be able to demonstrate the scope and importance of their contribution to the Navy Medical Department.

**The questionnaires.** Besides the information on rate, rating, NEC, time in service, etc., usually asked for in questionnaires, the NOTAP forms give corpsmen an opportunity to indicate how they acquired their

rating and NEC, to what degree their rating and NEC training are supportive of their present job, and whether or not they plan to reenlist. (Of course, reenlistment remarks are not binding in any way.)

The real substance of the questionnaire lies in six sections designed to pinpoint what people and their jobs need for satisfactory coexistence.

The first of these sections asks about *job titles*. Quite often, job titles give rise to misunderstanding, among corpsmen themselves and among others, about the role and responsibility the "label" should convey. We believe that the description for a job title at one command should approximate the description for the same title at another command.

The next section concerns *collateral duties* and is the place for indicating memberships on club advisory boards, on welfare and recreation councils, and in similar activities.

The following section, on *physical and mental job characteristics*, is designed to determine whether such characteristics as sharpness of vision or hearing, physical strength, ability to concentrate amid distractions, etc., are required by the corpsman's billet.

A fourth section, on *job satisfaction*, asks such questions as whether the corpsman has the opportunity to do worthwhile work, whether he can see the results of his efforts, and what is the quality of his relationship with others.

The fifth section deals with *equipment*. No doubt this may surprise many corpsmen. After all, we deal with the human body and not with equipment, don't we? But review of

this section will promptly indicate that the hospital corpsman is much more equipment oriented than may at first be perceived. Granted, a lot of that equipment is simple and commonly used, but this part of the questionnaire should provide a few surprises.

The final section is the most important: It contains *task statements* that pertain to the occupational specialty of the participant. While some of the questions in this section concern ratings skills common to all 13 specialty areas, a number of the questions relate only to the particular skills of the respondent.

In this section of the questionnaire, corpsmen will have an opportunity to give more than a simple "yes" or "no" response to various statements. As appropriate, they can point out such things as the time they spend on collateral duties and their overall job satisfaction. They can signify whether they operate or repair equipment, and how often they do so in the course of the year.

This section also provides for indication of the degree of responsibility the corpsman has for various tasks: "I assist," "I do" (perform), "I do and supervise," "I only supervise."

The NOTAP project is a huge undertaking, and its most important element is the individual who responds to the questionnaire. Completing the form takes about the same amount of time as taking an advancement examination, but this time it is *not* a test. There are no scores—no passing or failing grades. Rather, it is simply an attempt by the Navy to find out *how work is being done now*.

The Navy is asking you, the expert in your job, to tell us *what* you do; *how* you do it; and *how much time* you spend doing it.

—HMCM F.A. Burkhart, USN  
BUMED, Code 34

\*Afloat/Independent Duty (0000, 8402, 8407, 8425), Field Medical Service (8404), Biomedical Equipment Repair (8477, 8478, 8479), Radiology (8452), Preventive Medicine (8432), Ward Corpsmen (0000, 8485), Pharmacy (8482) Laboratory (8501-8507), Aerospace (8406, 8409), Optician (8463), Ocular and Otolaryngology (8444, 8445, 8446), Operating Room (8483), and Cardiorespiratory (8408).

# THE HOSPITAL CORPS . . .

CDR Walter A. Godfrey, MSC, USN

*CDR Godfrey has served since June 1974 as director of the Hospital Corps. Next month he will leave BUMED to take up a new post as director of administrative services at Naval Regional Medical Center Corpus Christi, Tex.*

*For this issue, which commemorates the 80th anniversary of the Hospital Corps' establishment, U.S. Navy Medicine asked CDR Godfrey to comment on some of the problems currently confronting the Corps—and on what the corpsman of the future can expect from his career.—Ed.*

In this issue of *U.S. Navy Medicine*, we honor 80 years of outstanding service by dedicated members of the Hospital Corps.

But I believe it is also important that we look to the future and attempt to determine what is in store for the only enlisted corps in the U.S. military establishment.

The Hospital Corps has always been a changing organization, adapting through the years to each challenge presented to it. Corpsmen are everywhere, doing everything—and usually doing it well. I believe this will continue to be so, but I sense that, over the next decade, demands will be made that will force more changes in the career patterns of hospital corpsmen.

For decades, hospital corpsmen have moved easily between two

very separate worlds: that of the hospital and that of the operational area (aboard ship; with aviation units; with the Fleet Marine Force, construction battalions, etc.). Today the demands of both these worlds are becoming yet more pressing.

I believe that certification of specialty personnel (radiology and laboratory technologists, inhalation therapists, etc.) will soon be a requirement for JCAH accreditation and to meet federal and state laws. In time, the process of certification will extend to all phases of health care delivery—and rightly so, since the consumer has the right to demand proof of expertise.

The operational forces face a unique problem. They not only require field medical technicians, submarine medicine technicians, etc., but must also have specialty personnel—and therein lies one of our bigger problems.

Is it good policy to educate and train a corpsman for one to two years as a specialist, then place him in a job where his skills are not fully utilized? How many people do we lose to civilian life who wish to practice their skills but instead see them deteriorating, because they must serve in a billet where there are no full-time demands?

On the other hand, if these technicians are not available when needed in the operational forces, our military health care delivery system is not doing its job.

I'm sure many quick answers can be offered to help solve this problem; however, for each action taken,



CDR Walter A. Godfrey

a reaction must be considered.

What about short tours for technicians at sea? This creates tremendous costs in dollars that are not available—and in personal turmoil for those involved.

We can produce technicians with lesser training in 52 weeks, but this would create additional turnover—and therefore require more PCS dollars—at a time when we face continual reduction in both manpower and funding.

Finding the answer to this problem of proper utilization of personnel will, I believe, be our most serious challenge in the future.

We have many initiatives at work

## . . . New Directions, Changing Times

to solve this problem: SHORE-STAMPS (Shore Requirements and Manpower Planning System) to determine staffing criteria; NOTAP (Navy Occupational Task Analysis Program) to analyze our training and utilization; an analysis of billet distribution; a new workload-measuring system to determine the proper allocation of resources, etc.

We are in an era of austerity, with not enough money or people to do all that we may wish to do, or that we should do. Fair sharing of the shortages must be the rule, as we strive to streamline our operations. These are some moves that will help us do so:

- I expect our training system to change, putting more emphasis on "training after schooling."
- Development of a management training course for senior and master chief petty officers will soon be a reality.
- Short-term, in-service "brush up" courses and specialty subject training by videotape cassettes are being planned.
- A billet review for all senior and master chiefs is now under way, with the goal of identifying more responsible positions, in management areas, that will take advantage of their experience and knowledge.
- Corpsmen will assume greater responsibility as "extenders."
- We will place greater reliance on electronics as we learn more about this important tool.

We must learn to properly integrate all our medical resources and distribute them where they are

needed, at the same time creating an atmosphere that attracts young men and women to careers as hospital corpsmen.

The Navy faces serious problems in retention of good people, and the Hospital Corps is no exception. There are a multitude of reasons for our lack of career-motivated personnel: the national economy; perceived lack of individual recognition and upward mobility, etc. Each corpsman opting to leave the Navy has his or her own reason; however, *esprit de corps* among those of us who have chosen to be careerists will be the foundation for better retention.

The future of the Hospital Corps depends upon actions we take in the present. *We* plan the future, and *we* are the example—like it or not—of what each new corpsman will imagine himself or herself to be in the years to come.

We should have a perpetual pride in what we do, always striving to do it better. We should jealously guard our expertise and not let it be watered down by those who are not willing to perform, or by those who refuse to apply themselves.

All corpsmen should continually evaluate themselves and their fellow corpsmen. Each corpsman should strive to be the best at what he or she does. This is a peacetime Navy: the bands are not playing, and our accomplishments are not always front-page material. But let one bullet be fired in anger and within hours hospital corpsmen will be called upon to move into the

breach and put their lives on the line. Readiness is imperative.

Many hospital corpsmen, over the past 80 years, have built the fine reputation now enjoyed by the Corps. We celebrate an anniversary this month, and we should honor those who came before. Our pride, expertise, and readiness to do the job at hand must enhance that reputation.

Stand up and be counted. Take pride in being what you are, and do not hesitate to let others know how proud you are. There are more than 200 million people in this country—but there are only 23,000 hospital corpsmen.

You are an elite group, a truly select group. Work hard to improve your technical expertise, but at the same time develop those qualities that will enhance your rise to positions of leadership.

In a military organization, it is not enough to be a technician. In times of stress, versatility is invaluable. Do not rest upon your academic laurels or expertise in your specialty—strive for responsibility and broad knowledge. Become totally involved in your command and committed to the Navy as well as to the space in which you work. You cannot expect to be a leader if you limit your experience.

I have served with extreme pleasure as director of the Hospital Corps Division for the past four years. To have concentrated my efforts on serving such an elite, special group of people has been an honor and a highlight of my career.

# All in the Corpsman's Day . . .

. . . counseling a dependent



Scott Day



. . . intensive care



LCPL Nancy LaLuntas

. . . field medical training





Claude Bob Johnson II



... community impact



J01 Lenny Gatto

... a small, wet crisis



PH2 David Fraker

... a moment's respite

# Residency Programs: Looking to the Future

*This recent exchange of letters between a young Reserve medical officer and the commanding officer of HSETC touches basic concerns for all those contemplating Navy residency training. For that reason, we are reprinting it here:*

CAPT Stephen Barchet, MC, USN  
Commanding Officer  
Naval Health Sciences Education & Training Command  
Washington, D.C. 20014

Dear Sir:

I am currently nearing the end of a West-Pac cruise as squadron medical officer for Desron Twenty-Five, Pearl Harbor. I have just finished reading the Surgeon General's "Special Report, SAC IX" in the November 1977 issue of *U.S. Navy Medicine*. It gave me the impetus to put into words some concerns I've been pondering for some time.

For background, I am serving my first year of active duty, following completion of an Ob-Gyn internship under Dr. Leon Speroff at the University of Oregon Health Sciences Center in Portland. I am a 1976 medical school graduate of the University of Washington, Seattle, where I was a Navy scholar under the Armed Forces Health Professions Scholarship Program for three years. Next year I hope to complete my two-year tour in Hawaii at the Naval Regional Medical Clinic, Pearl Harbor, doing adult medicine and office Gyn. This summer I will be applying for selection for a PG-2 Ob-Gyn residency slot to commence July 1979, which brings me to the main issue of my letter.

In assessing the Navy's Ob-Gyn programs on the West Coast as a student on my 45-day clinical clerkships, in internship interviews, and in discussions with residents and staff, I was generally impressed with the quality of care and training. I was also dismayed at the "writing on the wall" for the near future. As I see it currently, because of attrition, the end of the Berry Plan era, and the fact that we are in the lag phase of reaping benefits from out-of-service trained scholars, the West Coast programs will be severely short-staffed and "inbred" over the next few years. I realize these are speculations based on projections for which I don't have statistics, but my concerns are real and can probably best be summed up with a few questions.

1. Will the Navy's Ob-Gyn programs continue their past good quality, based on ample staff from diverse training backgrounds, dedicated residents, good paramedical support, and sufficient clinical material? Or will attrition and inbreeding truly jeopardize the quality of the programs?

2. Specifically, can you tell me what the expected or predicted staff strengths and backgrounds will be at Oakland, San Diego, and Portsmouth for the next 3-4 years?

3. Are there plans to cut back on these programs?

4. Will the scholars currently deferred for out-of-service Ob-Gyn training soon be filling staff positions at the training hospitals?

These questions may seem excessive or inappropriate, I know. No one knows for sure the exact number of staff necessary for good training. As well, no one can really prove that diversity of background adds significantly to the quality of a program. From school and my internship, I am convinced that the best residents were those most dedicated to their patients and the quality of care they were giving, regardless of who was staffing. At the same time one can hardly argue that different approaches to problems don't enhance training, and that adequate staffing, especially in clinics, isn't essential to quality education and quality care.

I like the Navy. When I applied for a scholarship there was no question as to which branch of the service I would choose. The Navy has given me a lot: A chance to have and raise a family (3 boys) in relative comfort during medical school. A change to go to sea, which I've always dreamed of. A chance to see how the "real" Navy operates. A chance to see half the world I had only viewed from *National Geographic* before. This break in my training, which I jestingly tell my fellow wardroom peers is my "sabbatical" year, has given me a perspective on life that could never have been hoped for if I had doggedly continued through my residency. For all of this, I am thankful to the Navy. I would like to train in the Navy. But when it comes to choosing my training, naturally I want the best for myself. I need assurances that the Navy will really continue to offer it. Otherwise, to be true to myself, I'll have to bide my time fulfilling my obligation and then seek training elsewhere. . . .

I concur with VADM Arentzen when he says "Our training programs must be first rate." I also believe that you and he are trying all you can to ensure that

they are. With this trust in mind, consider my concerns and answer them when you are able.

Respectfully,

/s/ Richard S. Herdener, LT, MC, USNR

LT Richard S. Herdener, MC, USNR  
Medical Officer  
Destroyer Squadron Twenty-Five  
FPO San Francisco 96601

Dear Doctor Herdener:

It is a pleasure for me to answer your letter of March 1, 1978, which contained both thoughtful questions and a responsible approach to your professional development in the Navy.

As you very correctly state in your letter, there are two important aspects to your professional development. Critical to any physician today is the opportunity to seek and obtain full residency education. Critical to Navy medical officers is that same opportunity, coupled with the absolute necessity to possess knowledge and skills upon which our Navy and country so depend. Obviously you have taken to heart the importance of being a naval medical officer, and you are viewing your "sabbatical year" in the clearest of perspectives.

In answer to your questions as to existing and future Navy Ob-Gyn program strengths, my personal views of these programs are positive. Staff strength and background expertise are sufficient; and I believe strongly that our programs will, over the upcoming years, remain fully competitive with the bulk of programs throughout the country. If I did not so strongly believe in the educational value of our Ob-Gyn programs, I would not endorse them to you. I, along with many others, am a product of the Navy's educational system—and that system, though not perfect, remains valid and useful today.

As a further personal suggestion to you, I strongly urge you to seek out, on your own, our Ob-Gyn program directors and their staffs and residents. Speak with them. See their programs. Judge for yourself the products of these programs. I doubt that you will find any major disappointments, and I'm convinced you will find that Navy Ob-Gyn practices and programs meet the test of stringently discriminating evaluations.

All best regards to you in your searches for personal excellence as a Navy Medical Corps officer. If I may be of further assistance, do not hesitate to write this command, and specifically the Director of Medical Corps Programs (Code 4) in HSETC.

Sincerely,

/s/ Stephen Barchet, CAPT, MC, USN

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## On Duty: Gator Dentistry

Photo of USS *Inchon* by PH3 M. Waschak

LT Douglas M. Arendt, DC, USN

**W**hat's it like to be a rookie dental officer on your first sea deployment?

For me, it's been an eye-opening experience, and certain features of it have caught me by surprise. It's my hope that the following tips from a "rookie gator" will be helpful to other dental officers on their first shipboard assignments.

**Procuring patients.** Where do your patients come from? My first response was "From the ship, of course," but this is not necessarily true. I soon found that men on other ships in the squadron or in the vicinity had the same dental needs as the

men on my ship, the USS *Inchon* (LPH-12).

Patients originate from a variety of ships that include cruisers, frigates, destroyers, oilers, and supply ships. Dental med-evacs can come from almost anywhere. Most ships don't have dental officers but do have a corpsman trained to administer emergency dental care and triage other cases to a dental officer. It is your professional responsibility to seek out these ships and offer help.

My plan of action evolved after I had gained experience in several training anchorages. The *Inchon* communicates with non-dental-staffed ships by message, seeking dental patients in acute pain or in need of care to forestall a future

dental emergency. The key to identifying these patients is the triage and recordkeeping by the independent-duty corpsman.

When other ships in your vicinity know you're there, you may initially have a flood of patients; however, once the backlog has been treated, the referral system functions more efficiently. Getting advance notice of patients' arrival gives you better control of scheduling and reduces inconvenience to your immediate patient pool and to patients from other ships.

Transportation between ships can usually be provided by boat or helicopter, using mail runs or administration boats throughout the day. Visiting patients may arrive in groups, during the morning, after-

LT Arendt is dental officer aboard the USS *Inchon* (LPH-12), FPO New York 09501.



noon, or evening session, and reading material and meals should be provided for them as necessary.

No matter how hard you try to plan ahead, don't be surprised if you are faced with a number of unexpected dental casualties. On several occasions you will be challenged by patients requiring far more treatment than you can complete in one sitting.

A sincere "thank you" and a patient's renewed interest in oral health can be very gratifying. It is unfortunate that you cannot provide total care to everyone, but this is impossible and is not within your mission, since you are limited by budgets, supplies and man-hours.

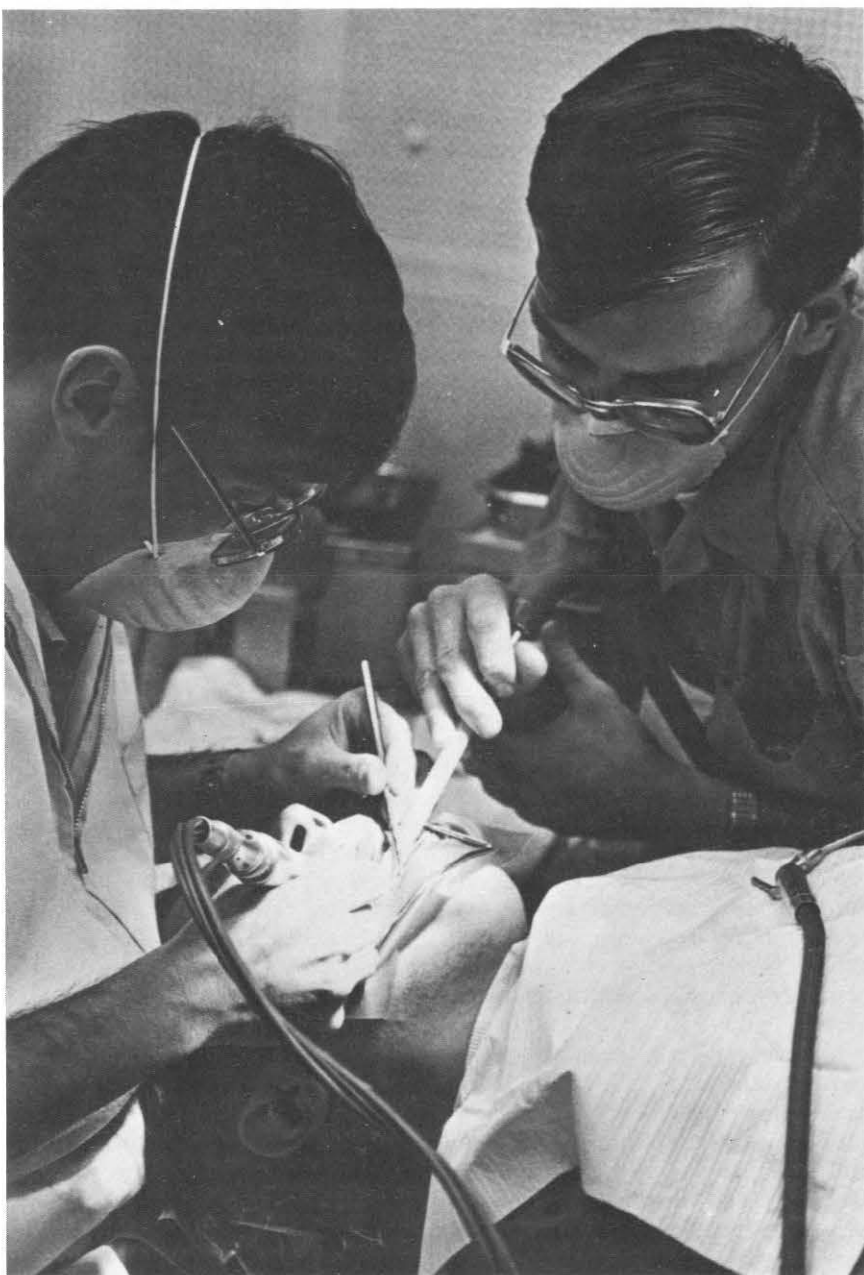
**Appointments.** Appointment books are great, but the first thing you'll need on a ship is a big eraser. Flexibility is a key word! Scheduling must be worked around general quarters, under way replenishments, working parties, drills, rough seas, lack of water, planning board for training meetings, department head meetings, narcotics inventories, and other tasks.

It is best to keep your appointment book in pencil and record information on names, rates, divisions, and telephone numbers (at least two per man). There is nothing more frustrating than playing hide-and-seek below decks, trying to find your patient.

During any major ship evolution, manpower is the number one priority, and as a result your patients may fail to show up or may cancel their appointments when their services are needed elsewhere. Try to maintain a standby list of easy-to-locate patients who can be substituted at short notice.

The hardest lesson for me was that while "Dental" is indeed an important part of the ship, at times it may have to take a back seat to the ship's primary functions or missions. No matter how you vary scheduling techniques, just when you think you have the answers, you're back to the drawing board. Remain flexible, and never give up!

**Hours.** Saturdays, Sundays and



Dr. Arendt (left) and DT3 M. Cortney work on patient aboard USS Inchon.

evenings can fairly and effectively be used to treat patients. I found Saturdays to be a good day for specialty care, and used evenings and Sundays as a buffer for missed appointments or overflow. Evenings can also be used for a maximum of three prophylactic appointments. This system is a great way to keep up-to-date on charts, X-rays, and your patients; however, it's easy to overwork your technicians, so when

they work extra hours, give them a little slack. Compensatory time away from the chair for an hour or so in the day, if you can spare them, gives them the opportunity to accomplish other work or personal errands. We alternated the nights that the technicians handled prophylactic appointments, and didn't schedule appointments for the same night the technicians had to clean up the Dental Clinic.

Remember, everyone must work together in small spaces for long hours. Be reasonable and invite input from your staff. The technicians' advice, experience, and preferences should be solicited; you'll be pleasantly surprised by the assistance they can provide.

**Supplies.** You should plan to be well stocked prior to deployment to avoid running short, since you may be surprised by your patient load.

Additional supplies can be hard to obtain while you are deployed, but there are a variety of sources. Some supplies, especially surgical consumables, are carried in the Consolidated Afloat Requisitioning Guide Overseas, and these can be obtained from under-way and vertical replenishments, with the assistance of your ship's supply officer.

When you're in a major port where an NSA facility is located, there will probably be a dental shore facility. Make a protocol visit to the shore station and let them know you need help. If sufficient supplies are on hand, you may be able to purchase needed items. If not, ask the shore dental clinic to act as liaison for you with the dental supply people. (All naval regional dental centers have fleet liaison officers.)

Last but not least, keep an inventory of your supplies on hand. Develop a good rapport with the ship's supply officer and his staff, and tell him your plan of action and goals for the next year. Project your necessary stock replenishments, using your DD-477 and deployment schedule, and create a "wish list" of items you realistically need for the future. You should justify your operating target with a record of work already accomplished.

An efficient supply system requires a central location for supplies, a supply inventory tickler system, and the use of supply-request chits within your clinic. Excess supplies in the clinic workspace clutter the clinic, indicate an inefficient technician, and preclude an up-to-date inventory. Operate the clinic as you would a large facility, having

the chairside technician prepare chits for future needs. This reduces waste, keeps the proper supplies on hand, and enhances security.

**Embarked personnel.** In the Gator Navy, we often have an embarked Dental Battalion Landing Team doctor who is responsible for dental care of the squadron's embarked Marines. This puts the ship's dental officer and the BLT dentist in a unique position: two kings in one castle.



DT2 A. Hanshaw monitors Dental Department budget.

As the ship's dental officer, you are responsible for the overall administrative function of the clinic. Duties, watches, cleanup, and inspections should be shared by the embarked staff. However, you must work with the BLT dentist, treating him as an equal—a fellow company commander—and including him in decisions, especially when they directly affect him or his assigned technician. Put yourself in his position, and respect him as a co-leader.

**Liberty.** When you get to a liberty port, go! You should make sure that your department is covered by a duty technician and schedule at least one sick call per day.

Take the initiative: at liberty call get on a bus or a train, or just walk,

and discover these cities you may never see again. Opportunities are endless for travel. The ship generally sponsors short tours, and the prices are more than reasonable. We on the *Inchon* have been able to see most of Sicily, all the major Italian ports, parts of Germany, Palma, and several Spanish cities. The point here is to work hard at sea and share the wealth during liberty hours while you're in port.

**Personnel and spaces.** It's to be hoped that you will be blessed with at least two hard-working, well-rounded dental technicians. They will need to muster every bit of foresight they have. They must be jacks-of-all-trades, since they will be involved in chairside, administrative, repair, and preventive duties.

The spaces aboard the *Inchon* consist of two dental operatories, an administration area, a combination X-ray/darkroom/storage area, and a lab area where minor prosthetic repairs and sterilization procedures are carried out.

I have mentioned just a few of the professional challenges you'll face. If you can build from these suggestions and survive the idiosyncrasies of shipboard life—such as no water after you've sudsed up in the shower, hot water but no cold water, or working in the dark—you will enjoy sea duty. Perhaps the most important thing to learn is to be patient and flexible, and to try to anticipate problems before they happen.

Although dentistry at sea is challenging, hard work, you may wonder if anyone really notices your efforts (I think they do). Overall, you'll probably have a feeling of great satisfaction when you've mastered each hurdle without quitting and experienced the exhilaration of a job well done. And one of your finest moments will come when you're on your way home to your family and you realize how much you've accomplished since graduation from dental school.

Good luck!

## Emergency Power for Hospitals

CDR John P. Swope, MC, USN, BUMED, Code 416

**W**ith growing dependence on new electrical and electronic apparatus for health care delivery, reliable electrical power has become vital.

Interruption of normal electrical service in health care facilities may be caused by catastrophes, such as fires, storms, floods, earthquakes, or explosions; by failure of systems, such as a grid failure; or by incidents within the facility.

On such occasions, normal service may not be restored for hours—or even for days. Thus, emergency backup systems must be provided so that continuity of vital services is preserved at all times, and internal disruption is limited.

### ESSENTIAL ELECTRICAL SYSTEMS

National Fire Protection Association (NFPA) Standard 76A, "Essential Electrical Systems for Health Care Facilities," describes performance and maintenance requirements for electrical systems in those portions of health care facilities where power outages would jeopardize the safety of patients and other occupants. This standard, covering the central electrical systems for hospitals, nursing homes, residential custodial care facilities, etc., has been coordinated with the National Electrical Code, NFPA Standard 70, 1978, and the Life Safety Code, NFPA Standard 101, 1976.

The "Essential Electrical Systems" for hospitals are the Emergency System and the Equipment System—two separate systems capable of supplying the limited lighting and power service required for life safety and effective hospital operation when normal electrical service is interrupted for any reason.

NFPA 76A specifies that the Emergency System is to be limited to circuits essential to life safety and critical patient care. (These circuits are designated the "Life Safety Branch" and the "Critical Branch.") The Equipment System is to supply major electrical equipment necessary for patient care and basic hospital operation.

The Emergency System is to be arranged so that, in the event of failure of the normal source of power, an alternate power source is connected within 10 seconds to the Emergency System loads. Time-delayed switching devices (either automatic or manual) are used to supply the Equipment System loads.

### EMERGENCY SYSTEM

Wiring for each branch of the Emergency System shall be separate and independent from all other wiring and equipment. Receptacles being supplied from the Emergency System shall be a distinct color or marked so as to be readily identifiable.

**Life Safety Branch.** The loads connected to the Life Safety Branch are:

- Illumination of the means of egress, exit signs, and exit directions (required by NFPA Standard 101, Life Safety Code, 1976).
- Alarms and alternate systems, including fire alarms, alarms required for medical gas systems, hospital communication systems, task illumination, and selected receptacles at the generator set locations.

No functions other than those listed here shall be connected to the Life Safety Branch.

**Critical Branch.** The loads connected to the Critical Branch shall supply power for task illumination and for selected receptacles serving the following areas and functions:

- Anesthetizing locations (task illumination only).
- The Isolated Power System (IPS), required in anesthetizing locations in the special environment.
- Patient-care areas—task illumination and selected receptacles in infant nurseries, medication prep areas, pharmacy, dispensary, selected acute nursing areas, psychiatric bed areas (task illumination only), ward prep rooms, nursing stations (unless adequately lighted by corridor luminaries).
- Additional specialized patient-care task illumination and selected receptacles where needed.
- Nurse call systems.
- Bone, blood and tissue banks.
- Telephone equipment room and closets.
- Task illumination, receptacles, and special power circuits selected for: acute care beds (selected), angiographic laboratory, cardiac catheterization laboratory, coronary care units, hemodialysis rooms or areas, emergency care treatment rooms or areas (selected), human physiology laboratory, intensive care unit, post-op recovery rooms (selected).
- Additional task illumination receptacles and special power circuits needed for effective hospital operation.



NFPA 76A permits the Critical Branch to be subdivided into two or more branches.

## EQUIPMENT SYSTEM

The Equipment System shall be installed and connected to the alternate power source so that equipment described in the following paragraph is automatically restored to operation *within an appropriate time interval following the energizing of the Emergency System*. This arrangement shall also provide for the subsequent manual connection of equipment.

Equipment for time-delayed automatic connection includes:

- Central suction systems serving medical and surgical functions, including controls.
- Sump pumps and other equipment required for operation of safety and major apparatus, including associated control systems and alarms.
- Compressed air systems serving medical and surgical functions, including controls.

The following equipment shall be arranged for either time-delayed automatic or manual connection to the alternate power source:

- Heating equipment for operation rooms, delivery rooms, labor rooms, recovery rooms, intensive care units, coronary care units, nurseries, and general patient-care rooms.
- Elevators selected to provide service to patient floors, surgical suites, or obstetrical suites during interruption of normal power. (In other elevators, where interruption of normal power would result in the elevator's stopping between floors, facilities shall be provided to allow for temporary operation, in order to release occupants who would otherwise be trapped.)
- Supply and exhaust ventilating systems for surgical, OB, and delivery suites; infant nurseries; infection isolation rooms; emergency treatment spaces; laboratories.
- Hyperbaric facilities.
- Hypobaric facilities.
- Doors operating automatically.
- Such other equipment as may be deemed necessary by the hospital, subject to approval of the authority having jurisdiction.
- Minimal electrical heating and autoclaving equipment.
- Other selected equipment.

## GENERAL SYSTEM REQUIREMENTS

In all facilities, the Essential Electrical Systems shall have a minimum of two independent sources of power—the normal source, which generally supplies the main power for the entire electrical system, and one or more alternate sources for use when the normal power supply is interrupted.

In most cases, the alternate source of power shall be

a generator, located on the premises and driven by some form of prime mover, such as an internal combustion engine. But in nursing homes or residential custodial care facilities that do not have patients whose lives are sustained by electromechanical means—and that offer no surgical treatment requiring general anesthesia—an automatic battery-operated system is sufficient.

NFPA 76A cautions that design of the Essential Electrical Systems should be such that simultaneous destruction of both normal service and the Essential Electrical Systems cannot occur as a result of a local catastrophe. In the design of these systems, consideration should be directed toward maximizing the reliability of the alternate power source and its feeders, rather than to protecting the equipment, providing protection is not required to prevent a greater threat to human life, such as explosion, electrocution, etc.

Other factors to be considered in design are:

- Abnormal currents that may cause interruption during overload.
- Abnormal voltages, such as switching transients and lightning surges.
- Capability for achieving fast restoration of power.
- Planning for future needs.
- Stability and power capability of the prime mover during and after abnormal conditions.
- Sequencing reconnection of power loads to avoid large current inrushes that could trip over-current devices or overload the generators.

**Transfer switches.** The number of transfer switches to be used should be based on reliable design and load considerations. Each branch of the Essential Electrical Systems shall be permitted to be served by one or more transfer switches. One transfer switch shall be permitted to serve one or more branches or systems in a smaller facility.

The systems may have automatic transfer switches and nonautomatic transfer switches. Each switch shall have the capacity to supply the loads to be served.

Automatic transfer switches shall be electrically operated and mechanically held. These transfer switches shall transfer and retransfer loads automatically. Reliable mechanical interlocking or other approved automatic methods shall be required for the automatic transfer switch and shall be inherent in the design to prevent interconnection of the normal and alternate sources of power.

Time-delay devices may be used:

- To delay starting the generator, in order to prevent nuisance tripping of the generator with transient voltage drop. (The generator still must be on line within 10 seconds.)
- To delay transfer to the alternate power source, in order to prevent heavy motors from starting loads simultaneously.
- To delay re-transfer to the normal power source, in order to allow the normal source to stabilize, and thus



avoid the tripping of current devices by heavy loads.

On automatic transfer switches, a test function shall be provided that will simulate a normal-power-source failure to the switch. Two pilot lights, properly identified, shall be provided to indicate the transfer switch position. A means for safe manual operation of the automatic transfer switch shall be provided.

Nonautomatic transfer switches shall be mechanically held. Operation shall be by direct manual or electrical remote manual control. The electrical-operation switches shall derive their control power from the source to which the load is being transferred.

Reliable mechanical interlocking or another approved method shall be inherent in the design, to prevent interconnection of the normal and the alternate sources of power, or any two separate systems of power. Pilot lights, properly identified, shall be provided to indicate the switch position.

**Generator sets.** Generator sets installed as an alternate source of power for the Essential Electrical Systems shall be designed to meet the requirements of such service. The generator equipment used shall be either reserved exclusively for such service or normally used for other purposes. If the equipment is normally used for other purposes, two such generator units shall be installed, so that demand and performance requirements of the Essential Electrical Systems shall be met with the largest single generator set out of service. (Exception: A single generator shall be permitted to operate the Essential Electrical Systems for peak-demand control, internal-voltage control, or relief for the external utility, provided that such use will not decrease the mean period between service overhauls to less than three years.)

Generator sets shall be installed in accordance with NFPA Standard 37, "Installation and Use of Stationary Combustion Engines and Gas Turbines," 1975.

Service transformers shall not be installed in the generator area. The generator shall be maintained in an appropriate temperature, and there shall be adequate air for cooling and replenishment of the engine-combustion air. The internal combustion starting battery shall have sufficient capacity to provide 60 seconds of continuous cranking. A compressed-air starting device for internal combustion engines shall have sufficient capacity to supply five 10-second starting attempts with not more than a 10-second rest between attempts.

Fuel for the generator shall be liquid, and there shall be on-site fuel storage capacity. The amount of fuel stored on-site shall depend on past outage records, possible delivery problems due to weather, fuel shortages in the area, and various other similar conditions.

Safety alarm devices for the internal combustion engine shall be provided. Prime movers other than internal combustion engines, serving generator sets, shall have appropriate signal devices, plus visual and audible alarms, to warn of malfunction. There shall also be alarms to warn of low fuel level.

Generator sets serving the Emergency and Equipment systems shall be inspected weekly and shall be exercised under load and operating temperature conditions for at least 30 minutes, at intervals of not more than 30 days. The 30-minute exercise period is an absolute minimum unless the manufacturer's recommendations dictate otherwise.

The scheduled test under load conditions shall include a complete, simulated cold start and appropriate automatic and manual transfer of all Essential Electrical Systems loads. This simulated cold start and transfer of all loads is primarily needed to demonstrate the availability of essential power.

A secondary benefit of the test is familiarization of the hospital staff with the emergency power available for patient care.

## Notes from the I.G., Medical

• **Linen management:** To minimize contamination, soiled linen should be deposited in impervious bags or containers that are closed at the site of collection.

• **Medical record:** *Request for Administration of Anesthesia and for Performance of Operations and Other Procedures*, Standard Form 522 (Rev. 10-76), is to be used for evidence of the patient's informed consent for any procedure or treatment performed, and is to include the name(s) of the individual(s) who perform the procedure or adminis-

ter the treatment. It has been noted that most hospitals and clinics are still using SF 522 (Rev. 1973).

• **Antibiotics:** The Infection Surveillance Committee should regularly review antibiotic usage, both quantitatively and qualitatively.

• **Medications:** The metric system shall be in use for all medications.

• **Continuing education:** The continuing education program for personnel in special care units must include precautions for all electrical equipment in use.

• **Safety:** Surgical overhead lights

in emergency rooms, treatment rooms and operating rooms should be routinely checked for stability, and records of these checks maintained.

• **Audit board membership:** In certain instances members of audit boards (collection agent, imprest fund, etc.) have been assigned without proper instructions or indoctrination. All commands should ensure that audit board members are fully instructed regarding proper audit procedures.

—RADM Roger F. Milnes, MC, USN

# Instructions and Directives

## FY79 dental residency/graduate/fellowship training programs

Residency and graduate training programs in various specialties are conducted at the National Naval Dental Center, Bethesda, Md., and at five naval regional medical centers (see chart). The number of residents in specific specialties may vary with current Navy regulations.

General descriptions of residency programs are contained in NAVMED P-5093. Several modifications in residency and graduate training programs will be instituted in FY79. These modifications include:

- *Two-year residency in comprehensive dentistry.* Applications for the program beginning in July 1979 at the National Naval Dental Center will be considered in September 1978. Dental officers selected will ordinarily continue in the second year of the program without having to reapply. The two-year program is designed to produce a trained subspecialist in all major disciplines of dentistry as practiced in the Navy, including endodontics, operative dentistry, oral diagnosis and oral medicine, oral surgery (primarily exodontia), periodontics, and prosthodontics. Comprehensive dental officers will be skilled clinicians whose knowledge and expertise in these fields, as well as in the fields of dental material, occlusion, patient motivation, personnel management, and preventive dentistry, will qualify them to treat all but the most complex cases requiring the services of a board-eligible/certified specialist. These officers will be prepared for positions of greater clinical responsibility within the Navy Dental Corps. A research project is performed during this residency. Satisfactory completion of this residency leads to eligibility for the proposed Tri-Service Comprehensive Dentistry Board Examination and Certification.

- *One-year graduate training in general clinical dentistry.* Applications for the program beginning in July 1979 at the National Naval Dental Center will be considered in September 1978. This program is designed primarily for dental officers with 7 to 10 years of clinical experience who wish to develop a high degree of proficiency in all disciplines in the practice of general clinical dentistry in the Navy. The curriculum is designed to update the dental officer's professional knowledge by integrating biomedical sciences with clinical practice. To a lesser degree, the curriculum includes basic sciences, theory, dental research, naval dental administration, management, and leadership. The goal of this graduate course is to improve the clinical proficiency of the general dentist and better enable dental officers to

INSERVICE TRAINING CAPABILITY							
SPECIALTY	TRAINING SITES AND NUMBER OF BILLETS						TOTAL
	NNDC * BETHESDA	NAVAL REGIONAL MEDICAL CENTERS					
		BETHESDA	GREAT LAKES	OAKLAND	PORTS- MOUTH, VA	SAN DIEGO	
ORAL PATHOLOGY 1st year	1*						1*
ENDODONTICS 1st year	3						3
2nd year	3						3
ORAL MEDICINE 1st year	1						1
2nd year	1						1
ORAL SURGERY 1st year		1	1	1	1	2	6
2nd year		1	1	1	1	2	6
3rd year		1	1	1	1	2	6
PERIODONTICS 1st year	3						3
2nd year	3						3
PROSTHODONTICS 1st year	6						6
2nd year	6						6
MAXILLO-FACIAL Optional 3rd year	1*						1*
COMPREHENSIVE DENTISTRY 1st year	5						5
2nd year	5						5
GENERAL CLINICAL DENTISTRY 1 year	9						9
OPERATIVE 1st year	1						1
2nd year	1						1

\*The total training program billets for Bethesda is 48. The oral pathology and maxillo-facial billets alternate with other training program billets.

\*The total training program billets for Bethesda is 48. The oral pathology and maxillo-facial billets alternate with other training program billets.

provide support to Fleet and Marine Corps personnel and other authorized beneficiaries.

- *Two-year residency in operative dentistry.* This program will be initiated at the National Naval Dental Center in July 1979. Applications for the program will be considered in September 1978.

NAVMED P-5093 contains a detailed description of inservice postdoctoral fellowship programs. It is anticipated that a limited number of applications will be approved for periodontics and research fellowships in FY79.

A limited number of positions are available to Navy Dental Corps officers for specialty training in civilian institutions. Outservice training is utilized to provide required training in those specialties where no inservice training program is available or where inservice capabilities are insufficient to meet requirements.

Applications for programs that commence during FY79 should be submitted by 1 July 1978 to the Commanding Officer, Naval Health Sciences Education and Training Command (Code 5), National Naval Medical Center, Bethesda, Md. 20014. MANMED art. 6-129 gives details on preparing applications. Applicants will be notified of the action taken on their requests

during October 1978.—BUMED Notice 1520 of 27 Feb 1978.

## Medical gas systems

The press has reported that some deaths of patients have occurred as a result of cross-connection of medical gas pipeline systems. A common thread in each of these incidents was failure to check content of the pipeline systems at the station outlet.

- NFPA 56F, Standard for Nonflammable Medical Gas Pipeline Systems (NOTAL), requires that all pipelines systems be checked for gas content after installation.
- NAVFAC Guide Specification TS-15403 of April 1977 (NOTAL) requires not only that the content of the gas be checked, but also that the gas be checked for impurities such as hydrocarbons, particulate matter, water, and carbon monoxide.
- NFPA 56A, Inhalation Anesthetic (NOTAL), requires that each anesthesia machine be checked at the common gas outlet for appropriate continuity of medical gas systems after each repair.

The commanding officer shall ensure that—in addition to the tests required by NFPA 56F—after installation of new piping systems or repair of existing piping systems, each station outlet of the gas piping system is analyzed for the appropriate gas. Samples of gas shall also be tested for specified contaminants, by methods designated in this instruction. A piping system shall be considered unlikely to contribute contaminants to the gas it transports, providing that a sample of gas from an outlet (a) does not have a noticeable odor different from that of the major component of the sample, (b) does not have a higher contaminant level than specified in this instruction, or (c) has a higher contaminant level than specified in this instruction, but no higher than that found in a sample of gas taken from the source.

The chief of anesthesia at each medical treatment facility shall ensure that when new anesthesia machines are delivered or existing anesthesia machines are repaired, the common gas outlet efflux is tested for the appropriate gas as described in NFPA 56A, Appendix F.

The tests and analyses required by this instruction shall be performed by qualified personnel. Records of tests and analyses required for gas piping systems shall be retained for two years, while records of those required for anesthesia machines shall be retained until the next repair.—BUMED Instruction 10330.2 of 3 March 1978.

## FY79 medical residency/fellowship training programs

Accredited residency training programs are conducted at naval regional medical centers and other Medical Department facilities in 32 specialties/subspecialties (see chart below). A limited number of positions are available to Navy Medical Corps officers for specialty or subspecialty training in civilian institutions. Outservice training is utilized to provide required training in those specialties where no inservice training program is available.

Applications should be submitted by 15 Aug 1978 to the Commanding Officer, Naval Health Sciences Education and Training Command (Code 4), National Naval Medical Center, Bethesda, Md. 20014. BUMED Instruction 1520.10G gives details on preparing applications. Applicants will be notified of the action taken on their requests during October 1978.—BUMED Notice 1520 of 1 May 1978.

RESIDENCIES/FELLOWSHIPS IN NAVAL ACTIVITIES INDICATING POSITIONS AT EACH YEAR LEVEL BY ACTIVITY

		Years of training Number of positions each year	Bethesda	Camp Pendleton	Charleston	Jacksonville	Oakland	Pensacola	Portsmouth VA	San Diego	Other
Aerospace Medicine	*	2	18	4			4		4	6	
Anesthesiology	*	3	8	3							
Dermatology	*	2	35	9	9	9		8			
Family Practice	*	1	1							1	
Hand Surgery	*	3	30	6			4		8	12	
Internal Medicine	*	2	4	2						2	
and Subspecialties		2	2	1			1				
Cardiology		2	2	1						1	
Endocrinology & Metabolism		3	3	1						2	
Gastroenterology		2	2	2							
Hematology/Oncology		2	1							1	
Infectious Disease		2	4	1					1	2	
Nephrology		3	3	3							
Pulmonary Disease		4	1	1							
Neurology	*	2	3	2			1				
Neurosurgery	*	3	18	3			3		6	6	
Nuclear Medicine	*	3	1								1
Obstetrics & Gynecology	*	3	8	3			2			3	
Occupational Medicine	*	4	12	2			3		3	4	
Ophthalmology	*	4	10	2			3		2	3	
Orthopedic Surgery	*	4	10	3			2		2	3	
Otolaryngology	*	1	1	1							
Pathology	*	2	16	3			3		5	5	
Hematopathology	*	2	1						1		
Pediatrics	*	3	1								1
Plastic Surgery	*	3	11	4			3		4		
Preventive Medicine (General)	*	3	16	6			3			7	
Psychiatry	*	4	13	3					4	4	
Radiology	*	1	1				2				
Surgery	*	2	2	1						1	
Peripheral Vascular Surgery	*	4	6	1			1		2	2	
Thoracic & CV Surgery	*										
Urology	*										

\*Indicates numbers of years training beyond GME year one.



# Alcoholism: Family Illness—Family Therapy

Pat Barnett

CDR Leslie C. Ellwood, MC, USN

A major goal of the Navy Medical Department is to seek out, identify, and rehabilitate Navy and Marine men and women who are alcoholics or "problem drinkers" and return them to good emotional health and full work productivity.

Excellent treatment for alcoholics is provided by carefully conceived rehabilitation programs at naval alcoholic treatment centers and units, a referral network of recovered Navy and Marine Alcoholics and supporting professionals, and Alcoholics Anonymous groups on shore and at sea. But is that enough? What about the emotional needs and maladaptive defenses that develop in members of the alcoholic's family? Should not our mission also include the necessary therapy for these other victims of alcoholism, the family disease?

The Norfolk Naval Alcohol Rehabilitation Center (ARC) opened some five years ago. In the beginning, its staff—like those of most Navy alcohol rehabilitation facilities—bent their efforts towards helping the alcoholic, not the sick family. Four years ago, CAPT Joseph A. Pursch, MC, USN, describing the program of the Navy Alcohol Rehabilitation Service, Long Beach, Calif., noted that "wives are involved in the rehabilitation process *wherever practical* [emphasis added] in order for them to understand how the disease has affected the family and how to cope with the problems" (*Naval Aviation News*, March 1974, pp 8-17).

But as more experience in rehabilitation programs

has been gained, the problems of concerned persons—the spouses and children of alcoholics—have been increasingly recognized, and the need for family therapy has become obvious. The resources to provide such treatment remain limited; however, ARC Norfolk has accepted the challenge and has devised a workable program. It is our belief that a similar commitment to the Navy alcohol program by all personnel of the Medical Department could produce multidisciplinary teams, coordinated by alcohol rehabilitation facility staffs, that would broaden the scope and effectiveness of assistance available.

### REASONS FOR FAMILY THERAPY

There are numerous benefits from family therapy in alcohol rehabilitation. It not only provides appropriate treatment for concerned persons but also significantly improves the outcome of the alcoholic's therapy. Often, as a result of the family program, the alcoholic will voluntarily seek help from Alcoholics Anonymous or the Navy treatment system because he has observed that his family has begun its own recovery. This earlier start in the alcoholic's recovery frequently averts work problems or need for disciplinary action. Additionally, total family involvement provides optimum success rates, many times higher than those for nonparticipating families.

Janzen (1) listed several other advantages pertinent to Navy programs, including the following:

- The percentage of patients attaining sobriety increases in proportion to contacts with the clinic by concerned persons.
- The family program reduces the total cost of rehabilitation and, if offered while the alcoholic is an

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inpatient, increases the likelihood that he or she will continue treatment as an outpatient.

- The alcoholic is less likely to regard himself as a "mental patient," since the family group is being treated.
- Alcoholics perceive their spouses' involvement as an expression of caring about them, and this increases their motivation.
- The program stimulates improvement of communication between alcoholic and spouse.
- The spouse's involvement requires and prepares the alcoholic to face discharge realities more directly, and allows for exposure and resolution of marital conflicts.

If we accept the idea that the concerned person also has the illness of alcoholism, then we must provide relief from the illness. Steyn (2) has stated that "helping an alcoholic reach sobriety without involving the family often renders the spouse severely ill, and you only transfer the malady from one family member to another."

Attempts to treat concerned persons' mental and psychosomatic pain in medical, surgical, emergency, pediatric, and gyn clinics, with laboratory tests, inadequate therapy, and tranquilizers, are obviously less beneficial than an effective program directed to the primary problem: alcoholism, the family illness.

As to the effects of parental alcoholism on children, living in an alcoholic family places the child in the high-risk category for school and behavioral problems; psychosomatic illness secondary to stress; delinquency; drug abuse in adolescence (3); and, for children of the same sex as the alcoholic parent, subsequent alcoholism. At least 50 percent of the wives in our therapy groups are from alcoholic homes, and approximately one out of every twenty report being raped by drunken fathers or stepfathers.

To use the example of another disease, we do not allow active-duty sailors with active tuberculosis to remain in the home, but first provide specific therapy to the sick patient until he is no longer infectious; evaluate and skin-test the family; and provide specific therapy and followup for identified skin-test convertors. Alcoholism kills or injures many more people among service personnel and their families than does tuberculosis. The implication of these statements should be obvious.

### **FAMILY THERAPY AT ARC NORFOLK**

The family program developed at the Norfolk Naval Alcohol Rehabilitation Center provides group and individual counseling for the spouse of the ARC

patient; anonymous group counseling for wives of practicing alcoholics; instruction in marriage and parenting skills for patients and their spouses; pediatric evaluation and group and individual counseling for children of alcoholics; and referrals for appropriate therapy in cases of child abuse or wife abuse. This broad range of services has been effective in treating concerned persons' pain and illness, in providing information about family dynamics to persons with inadequate family-experience imprint, and in significantly enhancing the effectiveness of therapy for the alcoholic.

Staff for the family program consists of one full-time family counselor and five volunteers who have gone through the program themselves and have been trained in interviewing patients and lecturing on aspects of alcoholism as a family disease. The benefit of having such volunteers is their first-hand knowledge of the problems and the recency of their experience with them.

Spouses of patients entering ARC are interviewed and individually counseled about the patient's alcoholism, their own role in the family illness, and the Al-Anon program. Only extreme distance of the spouse from the ARC, or a legal separation preparatory to divorce, precludes concerted Command effort to obtain the spouse's participation in the family program.

It is our philosophy that for most successful resolution of the problem the alcoholic's spouse should recover at the same time as the patient. The spouse attends two full days of group education and counseling sessions a week, for six weeks, during the same period that the alcoholic is a patient at the ARC. (Babysitting, if needed, is available at the Base nursery.) The group has as its therapeutic goals education about alcoholism; introspection and examination of the spouse's own personality; preparation for the problems of the recovery phase, after the patient's discharge from the ARC; and counseling about the possibility of the patient's return to active alcoholism. (Alcoholism is a chronic relapsing disease, and statistics show that three out of every ten alcoholic patients will return to destructive drinking.)

The spouses' educational program includes films; reading; and discussion of the "Big Book" by the founder of Alcoholics Anonymous, other books on alcoholism and recovery, and Al-Anon publications. The spouses are instructed in the Twelve Steps and Twelve Traditions of the Al-Anon family programs and are expected to attend Al-Anon meetings in the community.

The need for the concerned person to make major life adjustments as the alcoholic recovers is *constantly stressed*. When the spouse does not have a recovery program and the alcoholic recovers, the spouse loses the positions of controller, martyr, and enabler. Divorce becomes more likely, in the first to third year of sobriety, as a result of the change in the previous relationships. Feelings of desertion ("He might as well be drunk"), resulting from the alcoholic's frequent attendance at AA meetings and heavy involvement with other alcoholics, must also be resolved.

In addition to the program for patients' spouses, ARC Norfolk provides a treatment group for wives of practicing alcoholics who are *not* in rehabilitation therapy. This six-week program is available completely anonymously and is similar in content to the program described above. For most of those enrolled, it provides their first experience with having someone else care about *them* and *their* problems and needs.

The treatment group promotes stabilization of the family and improved mother-child dynamics, in spite of the alcoholic's continued illness. The spouses learn that their alcoholic partners must obtain care for their illness themselves. Spouses are taught to disentangle themselves from outside influences that tend to perpetuate the alcoholic's rationalization for destructive drinking. Although it is not the intent of the treatment group to coerce or manipulate the alcoholic into therapy, withdrawal of the spouse's inadvertent support of the alcoholic's drinking patterns frequently causes sufficient crisis to prompt some 50 percent of alcoholics to seek help through the ARC or Alcoholics Anonymous.

ARC provides a weekly support group for spouses who wish to continue in group therapy indefinitely, after the alcoholic has been discharged. Prerequisites for admission to this group are attendance of the six-week program previously described and participation in Al-Anon. The material covered varies with the needs of the individuals enrolled. The style is confrontive and supportive, and promotes personal growth.

For the past two years, with the cooperation of the Department of Pediatrics at NRMC Portsmouth, ARC Norfolk has provided therapy for the children of alcoholics.

Initial interviewing of concerned-person parents includes a questionnaire to screen for potential to abuse children, and families with such problems are referred to child advocacy committees for evaluation and counseling.

ARC patients' children who are more than seven years old are expected to attend Alateen meetings. These meetings help the child resolve his anger and resentment toward the alcoholic and the other parent by teaching him that both parents are ill, that he must be responsible for himself only, that he must stop enabling the alcoholic parent's drinking, and that he is not responsible for the alcoholic disease.

During rehabilitation therapy, alcoholic parents receive two lectures—followed by group discussion, led by a pediatrician or a pediatric nurse practitioner—on the effects of alcoholism on their children, child development, appropriate expectations of the child, and methods of child rearing. Most of these patients have ineffective relationships with their children and are most eager to develop parenting skills. Frequently, although parenting techniques are lacking, love is not.

Individual counseling for specific behavior problems (with the role of alcoholism always included in the discussion) is readily available to patients on request.

Recently, ARC Norfolk initiated an adolescent group (ages 11 to 15) and a children's group (ages 5 to 10)—both conducted by a pediatrician and a pediatric nurse practitioner at Boone Clinic\*—to provide more goal-directed therapy than is offered by Alateen. The groups were established for children of ARC patients with spouses enrolled in the family program. The children 8 years of age or older in these groups are expected to attend Alateen as well. A similar program for children of newly identified alcoholic families is held at the ARC by the staff psychologist.

Absence of effective communication between parents and adolescents, inability to express emotions, and self-destructive behavior are common problems found among these children. Through group interaction, they learn and practice self-evaluation, communication, appropriate expression of emotional needs, and parent-child conflict resolution.

One more aspect of the ARC programs should be mentioned. It has been noted that the percentage of patients under age 25 who achieve sobriety is low, and that the percentage of these patients who come from alcoholic families is very high. These young alcoholics are, in fact, also still acting out the stress of their own childhood in an alcoholic family. In a "youth group" for this class of patient, therapy is

\*The co-author, CDR Ellwood, and LT Tina Grant, NC, USN

specifically oriented toward treatment of their status as products of an alcoholic family. This treatment of another facet of their illness aids recovery.

## CONCLUSION

Alcoholism is the major chronic problem of the active-duty Navy and Marine community, and is also a significant problem of the dependent population. Not only alcoholics but concerned persons—spouses and children—need and deserve appropriate therapy. Such family therapy is being effectively deliv-

ered at ARC Norfolk, which would like to see additional family programs initiated and help develop a Navy-wide effort to provide this vital care.

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2. Steyn RW: Drink, doctors, and seadogs. *US Nav Med* 67(7):24-29, 1976.
3. Spevack M, Pihl RO: Nonmedical drug use by high school students: a three-year survey study. *Int J Addict* 11(5):755-792, 1976.

# BUMED SITREP

**TRAINING OPPORTUNITIES . . .** Preventive dentistry/public health training opportunities exist for dental officers who wish to assume additional responsibilities in total preventive health planning as well as take part in the other clinical disciplines. For additional information, contact CDR Sanford A. Glazer, DC, USN, Head, Preventive Dentistry Section, BUMED Code 6114, Washington, D.C. 20372. Telephone: Commercial (202) 254-4283; Autovon 294-4283.

**HYPERBARIC O<sub>2</sub> TREATMENT . . .** At the National Naval Medical Center, dental and medical investigators have completed a four-year, controlled, double-blind study of hyperbaric oxygen treatment of the chronic bone infection osteoradionecrosis.

One hundred percent oxygen therapy administered at two atmospheres (hyperbaric) was found to be more effective than 100 percent oxygen at one atmosphere (normobaric). Patients undergoing hyperbaric therapy were relieved of their severe pain, and other overt symptoms of infection—such as purulent drainage—were markedly diminished.

**NOISE MONITORING . . .** High-intensity noise levels in dental facilities will be monitored by BUMED to ensure preservation of hearing acuity in dental officers, technicians, civilian dental hygienists, and assistants. Monitoring will begin during the current fiscal year.

**CEARP MANUAL . . .** The *Navy Nurse Corps Continuing Education Approval*

and *Recognition Manual* was revised in February and is being distributed to Medical Department facilities where Nurse Corps officers are serving. The manual gives guidelines for planning and implementing continuing education programs and submitting them for approval. It also outlines the criteria on which approval is based.

Applications for approval of continuing nursing education programs or offerings should be forwarded to the Commanding Officer, Naval Health Sciences Education and Training Command (HSETC), Code 7, National Naval Medical Center, Bethesda, Md. 20014, following procedures set forth in the *CEARP Manual*.

Questions about CEARP may be addressed to the Director, Nurse Corps Programs, at the above address; telephone: Autovon 295-0630; Commercial (202) 295-0630.

**AUDIT TIPS . . .** Activities generally have adequate instructions covering timekeeping and civilian payroll procedures but have not sufficiently monitored implementation of the procedures. With the issuance of SECNAV Instruction 7510.8 of 15 Oct 1976, Internal Review was given a new thrust and dimension within the Department of the Navy. The Internal Review function includes an annual audit of timekeeping and civilian payrolls. . . . The following discrepancies were noted on a recently completed audit: • Revise the Basic Facilities Requirements List to comply with the criteria of NAVFAC P-80, as required by NAVFACINST 11010.44B;

• Conduct semiannual walk-through inspections, in accordance with BUMEDINST 6700.37.

**UCA IMPLEMENTATION . . .** Implementation of the DOD Medical Treatment Facility Uniform Chart of Accounts (UCA) is continuing at four Navy test sites. The first Military Expense and Performance Reports (MEPR) were received from the test sites in late February of this year. These quarterly reports are designed to provide a common standard of expense and performance measurement that will allow any military medical treatment facility to be compared with its counterpart in another military department or the civilian sector. A data-processing capability to produce the MEPR and other cost-finding reports is currently under development. Its goal is to minimize the impact on the services and provide timely, accurate reports. Full, worldwide implementation of the UCA remains scheduled for 1 Oct 1979.

**SMOKING REPORT . . .** *The Smoking Digest—Progress Report on a Nation Kicking the Habit* is a 127-page booklet designed as a tool for public education.

The report summarizes current knowledge of smokers' attitudes and practices, biomedical effects of smoking, programs to help smokers rid themselves of the habit, etc.

Copies of *The Smoking Digest* are available free to health planners and professionals. Write the Office of Cancer Communications, National Cancer Institute, Bethesda, Md. 20014.

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